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Docket No. G-077US03DIV
Serial No. 10/664,025In the Claims

1-46 (canceled).

47 (new). An isolated and purified nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903.

48 (new). The nucleic acid sequence of claim 47 comprising nucleotides 53 to 103 of SEQ ID NO: 43.

49 (new). The nucleic acid sequence of claim 47, wherein said polypeptide is encoded by nucleotides 53 to 511 of SEQ ID NO: 43.

50 (new). The nucleic acid sequence of claim 48, wherein said polypeptide is encoded by nucleotides 53 to 511 of SEQ ID NO: 43.

51 (new). The nucleic acid sequence of claim 47, wherein the nucleic acid sequence encoding said signal peptide is fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

52 (new). The nucleic acid sequence of claim 48, wherein said signal sequence is fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

- 53 (new). An expression vector comprising a promoter operably linked to:
- (a) a nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903;
 - (b) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43;
 - (c) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43;

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- (d) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903; or
- (e) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

54 (new). The expression vector of claim 53, wherein said nucleic acid sequence encodes a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903.

55 (new). The expression vector of claim 53, wherein said nucleic acid sequence comprises nucleotides 53 to 103 of SEQ ID NO: 43.

56 (new). The expression vector of claim 53, wherein said nucleic acid sequence comprises nucleotides 53 to 511 of SEQ ID NO: 43.

57 (new). The expression vector of claim 53, wherein said nucleic acid sequence comprises comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

58 (new). The expression vector of claim 53, wherein said nucleic acid sequence comprises nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

59 (new). The expression vector of claim 53, wherein said vector is a secretion vector.

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60 (new). A host cell comprising an expression vector comprising a promoter operably linked to;

- (a) a nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903;
- (b) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43;
- (c) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43;
- (d) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903; or
- (e) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

61 (new). The host cell of claim 60, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence that encodes a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903.

62 (new). The host cell of claim 60, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence that comprises nucleotides 53 to 103 of SEQ ID NO: 43.

63 (new). The host cell of claim 60, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence that comprises nucleotides 53 to 511 of SEQ ID NO: 43.

64 (new). The host cell of claim 60, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence that comprises comprising nucleotides 53 to 103

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of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

65 (new). The host cell of claim 60, wherein said expression vector comprises a promoter operably linked to a nucleic acid sequence that comprises nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903.

66 (new). A method of making a secreted protein comprising the step of introducing a vector comprising a promoter operably linked to:

- (a) a nucleic acid sequence encoding a signal peptide comprising amino acids -17 to -1 of SEQ ID NO: 3903;
- (b) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43;
- (c) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43;
- (d) a nucleic acid sequence comprising nucleotides 53 to 103 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903; or
- (e) a nucleic acid sequence comprising nucleotides 53 to 511 of SEQ ID NO: 43 fused in frame to the 5' end of a nucleic acid sequence encoding a polypeptide that is heterologous to a polypeptide comprising amino acids 1 to 103 of SEQ ID NO: 3903;

into an expression system.

67 (new). The method of claim 66, wherein said expression system is a mammalian, yeast, insect or bacterial expression system.

68 (new). The method of claim 66, further comprising the step of isolating the secreted protein.

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69 (new). The method of claim 66, further comprising the step of purifying the secreted protein.

70 (new). The method of claim 68, further comprising the step of purifying the secreted protein.

71 (new). The method of claim 67, further comprising the step of isolating the secreted protein.

72 (new). The method of claim 67, further comprising the step of purifying the secreted protein.

73 (new). The method of claim 71, further comprising the step of purifying the secreted protein.

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